



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,866	06/26/2003	Yunoh Jung	20862.B.NP	5518
20551	7590	05/10/2005	EXAMINER	
THORPE NORTH & WESTERN, LLP. 8180 SOUTH 700 EAST, SUITE 200 P.O. BOX 1219 SANDY, UT 84070			MANAHAN, TODD E	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/606,866

Applicant(s)

JUNG ET AL.

Examiner

Todd E. Manahan

Art Unit

3732

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 Feb 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,8-28,33 and 36-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,8-10,36 and 37 is/are allowed.
- 6) ☒ Claim(s) 11-28,33 and 38-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The holes comprising a substantially round elongate chamber having a depth greater than a width, as set forth in claims 40 and 41 does not have antecedent basis in the specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-16, 18-25, 27, 28, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter (United States Patent No. 5,466,152) in view of Presswood (United States Patent No. 5,403,185).

Walter discloses the invention essentially as claimed except for pressing the registration pin through a thin piercable membrane extending across the registration holes. Presswood discloses that it is known in the art to provide an articulator tray with a thin membrane extending across the apertures therein and piercing it by a registration pin in order to prevent dental plaster from leaking thru the registration holes in the tray (see col. 4, lines 1-22). It would have been obvious to one skilled in the art to provide the device of Walter with a thin membrane extending across the registration pin holes and then press the registration pin through the membrane in view

Art Unit: 3732

of Presswood in order to prevent leakage of dental plaster thru the registration holes. With regard to the other structure, such as the hinge structure, which may not be present in Walter, it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

Claims 11-17, 19-26, 28, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman (United States Patent No. 5,788,489) in view of Presswood.

Huffman discloses the invention essentially as claimed except for pressing the registration pin through a thin piercable membrane extending across the registration holes. Presswood discloses that it is known in the art to provide an articulator tray with a thin membrane extending across the apertures therein and piercing it by a registration pin in order to prevent dental plaster from leaking thru the registration holes in the tray (see col. 4, lines 1-22). It would have been obvious to one skilled in the art to provide the device of Huffman with a thin membrane extending across the registration pin holes and then press the registration pin through the membrane in view of Presswood in order to prevent leakage of dental plaster thru the registration holes. With regard to claim 17, Huffman discloses registration struts 7 over which the plaster is disposed. With regard to the other structure, such as the struts being hexagonal, which may not be shown by Huffman, it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

Art Unit: 3732

Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Presswood.

Walter discloses the invention essentially as claimed except for the thin piercable membrane extending across the registration holes. Presswood discloses that it is known in the art to provide an articulator tray with a thin membrane extending across the apertures therein and piercable by a registration pin in order to prevent dental plaster from leaking thru the registration holes in the tray (see col. 4, lines 1-22). The membrane may be placed on either the top side or the bottom side of the tray. It would have been obvious to one skilled in the art to provide the device of Walter with a thin membrane extending across the registration pin holes in view of Presswood in order to prevent leakage of dental plaster thru the registration holes. Regarding claim 40, placement of the membrane on the bottom of the tray of Walter and across the registration holes would meet the limitation of the membrane disposed "below a surface of the at least one of the trays" and with such placement, "the thin membrane creates an air pocket in the elongate chamber when casting material is poured".

#### ***Allowable Subject Matter***

Claims 1, 3, 4, 8-10, 36 and 37 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed 25 February 2005 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

Art Unit: 3732

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant further argues that Presswood teaches away from the proposed combination and that the examiner has “improperly ‘picked and chose’ one isolated disclosure from the prior art”. Though the entire method of Presswood is different from applicant’s claimed method, it is the teachings in Presswood that are being relied up and that must be evaluated fro what they reasonably teach one of ordinary skill in the art. In the instant case, Presswood discloses that when using a try having a plurality of registration pin holes therein, plaster will leak from the pin holes. To solve this problem, Presswood utilizes a thin membrane places across the holes as clearly set forth in col. 4, lines 1-22. Presswood then pierces the membrane with registration pins, and though the registration pins are removed at one point during the process disclosed by Presswood, plaster is still prevented from entering the other holes in the tray that are covered by the membrane. Applicant argues that because Presswood removes the pins, one would not combine the teachings therein with the methods disclosed by Walter or Huffman wherein the registration pins remain in the holes of the tray until the plaster is set. It is noted that the problem solved by Presswood by using a membrane, namely plaster seeping through the registration pin holes would also be a problem experienced by the processes disclosed by both Walter and Huffman where multiple registration pin holes in the tray are left unoccupied when the plaster is poured. Clearly on skilled in the art, using the disclosure of Presswood, would see the benefit of using the membrane and piercing it with the registration pin in order to prevent plaster from seeping through the unoccupied registration holes.

*Conclusion*

This is a RCE of applicant's earlier Application No. 10/606,866. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 571 272- 4713. The examiner can normally be reached on Mon-Fri.

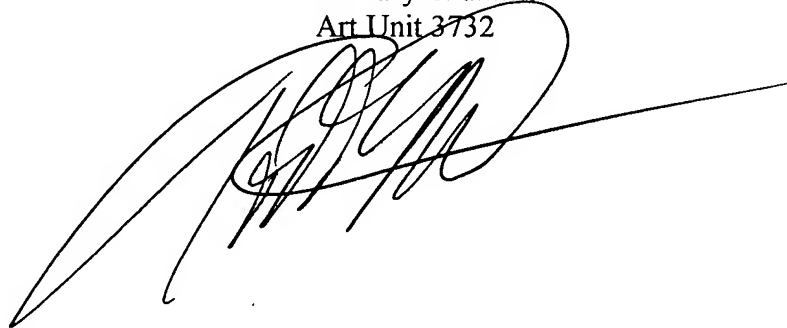
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571 273-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Todd E. Manahan  
Primary Examiner  
Art Unit 3732

T.E. Manahan  
3 May 2005

A large, stylized handwritten signature in black ink, likely belonging to Todd E. Manahan, is written over the printed name and title. The signature is fluid and cursive, with a long horizontal stroke extending to the right.